CLAIMS

What is claimed is:

1. A signal bearing medium tangibly embodying a program of machine-readable instructions executable by a digital processing apparatus to perform a method for error tracking, the method comprising the following operations:

sending a data object to a first location;

determining if the data object was successfully stored at the first location, and if so, storing meta data corresponding with the data object, wherein the meta data includes first path information;

sending the data object to a second location; and

determining if the data object was successfully stored at the second location, and if so, adding second path information to the meta data corresponding with the data object, to update the meta data.

2. The signal bearing medium of claim 1, wherein the operations further comprise:

detecting that the data object is corrupted;

analyzing error logs for all devices included in the meta data corresponding with the data object; and

identifying all devices included in the meta data corresponding with the data object that indicate an error in their error log.

3. The signal bearing medium of claim 2, wherein the operations further comprise searching for an uncorrupted copy of the data object.

4. The signal bearing medium of claim 2, wherein the operation of detecting that the data object is corrupted comprises examining a CRC base in data.

5. The signal bearing medium of claim 2, wherein the operations further comprise:

searching meta data corresponding with an additional data object to determine if any device identified has having an error in its error log is included in the meta data corresponding with the additional data object, and if so:

analyzing the additional data object to try to determine if the additional data object is corrupted.

6. The signal bearing medium of claim 1, wherein the first path information includes a time identifier and a destination identifier.

7. The signal bearing medium of claim 1, wherein the second path information includes a date and time that the data object was stored at the second location, and a source identifier, and a destination identifier.

8. The signal bearing medium of claim 7, wherein the second path information further includes information identifying at least one hardware device that is in the data path of the data object between the first location and the second location.

9. The signal bearing medium of claim 8, wherein the at least one hardware device includes a switch.

10. The signal bearing medium of claim 1, wherein the operation of sending the data object to the second location comprises migrating the data object to tape.

11. The signal bearing medium of claim 1, wherein the operation of sending the data object to the second location comprises sending the data object from the first location to the second location.

12. The signal bearing medium of claim 1, wherein the operations further comprise:

sending the data object to a third location; and determining if the data object was successfully stored at the third location, and if so, adding third path information to the meta data corresponding with the data object, to update the meta data.

13. A signal bearing medium tangibly embodying a program of machine-readable instructions executable by a digital processing apparatus to perform a method for error tracking, the method comprising the following operations:

sending a data object to a first location and a second location at substantially the same time;

determining if the data object was successfully stored at the first location and the second location, and if so, storing in a single meta data record, meta data corresponding with the data object, wherein the meta data comprises first path information including a first source identifier, a first destination identifier, and a second destination identifier;

sending the data object from the first location to a third location; and

determining if the data object was successfully stored at the third location, and if so, adding second path information to the meta data corresponding with the data object, to update the meta data.

14. The signal bearing medium of claim 13, wherein the first path information further comprises a first time identifier.

15. The signal bearing medium of claim 13, wherein the second path information comprises a second source identifier, a third destination identifier, and a second time identifier.

16. A signal bearing medium tangibly embodying a program of machine-readable instructions executable by a digital processing apparatus to perform a method for error tracking, the method comprising the following operations:

sending a data object to a first location and a second location at substantially the same time;

determining if the data object was successfully stored at the first location, and if so, storing in a single meta data record, meta data corresponding with the data object, wherein the meta data includes first path information comprising a first source identifier and a first destination identifier;

determining if the data object was successfully stored at the second location, and if so, also storing in the single meta data record, additional meta data corresponding with the data object, wherein the additional meta data includes additional first path information comprising a second destination identifier;

sending the data object from the first location to a third location; and

determining if the data object was successfully stored at the third location, and if so, adding second path information to the meta data corresponding with the data object, to update the meta data.

17. A signal bearing medium tangibly embodying a program of machine-readable instructions executable by a digital processing apparatus to perform a method for error tracking, the method comprising the following operations:

sending a data object to a first location, a second location, and a third location at substantially the same time;

determining if the data object was successfully stored at the first location, and if so, storing in a single meta data record, meta data corresponding with the data object, wherein the meta data includes first path information comprising a first source identifier and a first destination identifier;

determining if the data object was successfully stored at the second location, and if so, also storing in the single meta data record, first additional meta data corresponding with the data object, wherein the first additional meta data includes additional first path information comprising a second destination identifier; and determining if the data object was successfully stored at the third location, and if so, also storing in the single meta data record, second additional meta data corresponding with the data object, wherein the second additional meta data includes additional first path information comprising a third destination identifier.

18. The signal bearing medium of claim 17, wherein the operations further comprise:

sending the data object from the first location to a fourth location; and

determining if the data object was successfully stored at the fourth location, and if so, adding second path information to the meta data corresponding with the data object, to update the meta data.

19. The signal bearing medium of claim 17, wherein the first location is in a disk array, the second location is a first tape library and the third location is a second tape library.

20. The signal bearing medium of claim 18, wherein the first path information further comprises a first time identifier, and wherein the second path information comprises a second source identifier, a fourth destination identifier, and second time identifier.

21. A computing system, comprising:

a storage; and

a processing device coupled to the storage, wherein the processing device is programmed to perform operations for error tracking, the operations comprising:

sending a data object to a first location;

determining if the data object was successfully stored at the first location, and if so, storing meta data corresponding with the data object, wherein the meta data includes first path information;

sending the data object to a second location; and determining if the data object was successfully stored at the second location, and if so, adding second path information to the meta data corresponding with the data object, to update the meta data.

22. The computing system of claim 21, wherein the second path information includes a date and time that the data object was stored at the second location, and a source identifier, and a destination identifier.

23. The computing system of claim 21, wherein the operations further comprise:

detecting that the data object is corrupted;

analyzing error logs for all devices included in the meta data corresponding with the data object; and

identifying all devices included in the meta data corresponding with the data object that indicate an error in their error log.

24. The computing system of claim 23, wherein the operations further comprise:

searching meta data corresponding with an additional data object to determine if any device identified has having an error in its error log is included in the meta data corresponding with the additional data object, and if so:

analyzing the additional data object to try to determine if the additional data object is corrupted.

25. A computing system, comprising:

a storage; and

a processing device coupled to the storage, wherein the processing device is programmed to perform operations for error tracking, the operations comprising:

sending a data object to a first location and a second location at substantially the same time;

determining if the data object was successfully stored at the first location and the second location, and if so, storing in a single meta data record, meta data corresponding with the data object, wherein the meta data comprises first path information including a first source identifier, a first destination identifier, and a second destination identifier;

sending the data object from the first location to a third location; and

determining if the data object was successfully stored at the third location, and if so, adding second path information to the meta data corresponding with the data object, to update the meta data.

26. A computing system, comprising:

means for sending a data object to a first location;

means for determining if the data object was successfully stored at the first location;

means for storing meta data corresponding with the data object, wherein the meta data includes first path information;

means for sending the data object to a second location;

means for determining if the data object was successfully stored at the second location;

means for adding second path information to the meta data corresponding with the data object, to update the meta data;

means for detecting that the data object is corrupted;

means for analyzing error logs for all devices included in the meta data corresponding with the corrupted data object; and

means for identifying all devices included in the meta data corresponding with the data object that indicate an error in their error log.

27. A method for error tracking, comprising the following operations:

sending a data object to a first location;

determining if the data object was successfully stored at the first location, and if so, storing meta data corresponding with the data object, wherein the meta data includes first path information;

sending the data object to a second location; and

determining if the data object was successfully stored at the second location, and if so, adding second path information to the meta data corresponding with the data object, to update the meta data.

28. The method of claim 27, wherein the operations further comprise:

detecting that the data object is corrupted;

analyzing error logs for all devices included in the meta data corresponding with the data object; and

identifying all devices included in the meta data corresponding with the data object that indicate an error in their error log.

29. The method of claim 28, wherein the operations further comprise:

searching meta data corresponding with an additional data object to determine if any device identified has having an error in its error log is included in the meta data corresponding with the additional data object, and if so:

analyzing the additional data object to try to determine if the additional data object is corrupted.

30. The method of claim 27, wherein the second path information includes a date and time that the data object was stored at the second location, and a source identifier, and a destination identifier.

31. A method for error tracking, comprising the following operations:

sending a data object to a first location, a second location, and a third location at substantially the same time;

determining if the data object was successfully stored at the first location, and if so, storing in a single meta data record, meta data corresponding with the data object, wherein the meta data includes first path information comprising a first source identifier and a first destination identifier;

determining if the data object was successfully stored at the second location, and if so, also storing in the single meta data record, first additional meta data corresponding with the data object, wherein the first additional meta data includes additional first path information comprising a second destination identifier;

determining if the data object was successfully stored at the third location, and if so, also storing in the single meta data record, second additional meta data corresponding with the data object, wherein the second additional meta data includes additional first path information comprising a third destination identifier;

sending the data object from the first location to a fourth location;

determining if the data object was successfully stored at the fourth location, and if so, adding second path information to the meta data corresponding with the data object, to update the meta data.